



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3406 FAX (603) 271-7894



January 7, 2004
Letter of Deficiency
DSP#04-002

Mr. William Igoe
Frasier Paper NH LLC
650 Main Street
Berlin, NH 03570

RE: Alpine Cascade Brook Dam #024.17, Berlin

Dear Mr. Igoe:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 23, 2003. During this visual inspection and/or file review, the following deficiencies were observed:

- There were trees and brush growing from the downstream masonry faces of the dam and within 10 feet of the downstream toe of the dam;
2. There was active leakage through the downstream face of both the right and left masonry walls;
 3. Cracking of the concrete mortar, used to point to the downstream face of the dam, was evident implying structural movement of the wall;
 4. The dam cannot safely pass the design storm event without overtopping the structural portions of the dam;
 5. There is no flash pin design on file for the wooden flashboards;
 6. The operability of the low level outlet is unknown;
 7. The purpose for the metal flashboards is unknown; and
 8. There is no operation and maintenance plan (O&M) on file at DES

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

February 1, 2004:

1. Prepare and submit to the DES a written O&M plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel. Refer to the enclosed guidelines;
2. Comment on the operability of the low level outlet including information on the operating procedures and when it was last used;

3. Comment on the use for the metal flashboards on the right end of the dam. Consider removal of these boards since they do not effectively control the impoundment level and may be destabilizing the masonry structure during storm events;

June 1, 2004:

4. Remove the trees and brush growth from the downstream masonry faces of the dam and within 10 feet of the downstream toe of the dam;
5. Provide design calculations for the wooden flashboards showing that they will automatically fail, with appropriate freeboard, before the dam is overtopped;
6. Verify that the structure is stable for overtopping during the design storm event (50-year storm); and

November 1, 2004:

7. Repair the downstream masonry faces of the dam that show signs of cracking, movement and extensive leakage.

If you decide not to complete the aforementioned items of deficiency and would like to look into the removal of the dam the following items should be completed by the following schedule:

February 1, 2004:

Submit an O&M plan for the dam;

June 1, 2004:

2. Submit a proposal to DES with detailed plans and specifications for breaching the dam in accordance with the requirements and recommendations of DES; and

November 1, 2004:

3. Obtain all necessary permits or approvals and perform all work required to breach the dam

If you require additional information relative to removal of dams you can contact Stephanie Lindloff, River Restoration Coordinator at 271-3406.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. Please call or write to our office if the repairs are completed before the aforementioned schedule. We have enclosed a self addressed stamped envelope for you to return this form.

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Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at 29 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095.

Sincerely,


COPY

Grace E. Levergood, P.E.
Dam Safety Engineer

Attachments Guideline for an O&M plan, DB8, DB13

cc: Gretchen Rule ✓
Town of Berlin

Stephanie Lindloff, Rivers Restoration Coordinator

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